C. Pharmacological Treatment

There are currently no particular pharmacological treatments for dependence on amphetamine-like drugs such as methamphetamine. The current pharmacological approach is borrowed from experience with treatment of cocaine dependence. Unfortunately, this approach has not met with much success since no single agent has proven efficacious in controlled clinical studies. Antidepressant medications are helpful in combating the depressive symptoms frequently seen in methamphetamine users who recently have been abstinent.

There are some established protocols that emergency room physicians use to treat individuals who have had a methamphetamine overdose. Because hyperthermia and convulsions are common and often fatal complications of such overdoses, emergency room treatment focuses on the immediate physical symptoms. Overdose patients are cooled off in ice baths, and anticonvulsant drugs may be administered also.

Acute methamphetamine intoxication can often be handled by observation in a safe, quiet environment. In cases of extreme excitement or panic, treatment with anti- anxiety agents such as benzodiazepines has been helpful, and in cases of methamphetamine-induced psychoses, short-term use of neuroleptics has proven successful.

Resources

National Institute on Drug Abuse

Epidemiologic Trends in Drug Abuse Advance Report, December 2002.
www.drugabuse.gov/about/organization/CEWG/AdvancedRep/1202adv/1202adv.html

Drug Availability Estimates in the United States,

December 2002.
www.whitehousedrugpolicy.gov/publications/pdf/drugavailability.pdf

Drug Policy Information Clearinghouse, Street Terms: Drugs and the Drug Trade, 2002.
www.whitehousedrugpolicy.gov/streetterms/default.asp

U.S. Department of Health and Human Services:

Centers for Disease Control and Prevention

Alabama
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Department of Mental Health
lifting life's possibilities

Alabama Department of Mental Health

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Methamphetamine

Alabama SBIRT

Methamphetamine

What is methamphetamine?

It is a powerfully addictive stimulant that dramatically affects the central nervous system. It is made in clandestine laboratories with relatively inexpensive over-the-counter ingredients. These factors combine to make methamphetamine a drug with high potential for widespread abuse.

Methamphetamine is commonly known as "speed, meth, and chalk" In its smoked form, it is referred to as, "ice, crystal, crank, and glass" It is a white odorless, bitter-tasting crystalline powder that easily dissolves in water or alcohol. The drug was developed early in this century from its parent drug, amphetamine, and was used originally in nasal decongestants and bronchial inhalers.

Methamphetamine's chemical structure is similar to that of amphetamine, but it has more pronounced effects on the central nervous system. Like amphetamine, it causes increased activity, decreased appetite, and a general sense of well-being. It's affects can last 6 to 8 hours. After the initial , "rush", there is typically a state of high agitation that in some individuals lead to violent behavior.

Methamphetamine is a Schedule II stimulant, which means it has a high potential for abuse and is available only through prescription that cannot be refilled. There are a few accepted medical reasons for its use, such as the treatment of narcolepsy, attention deficit disorder, and—for short-term use—obesity; but these medical uses are limited.

How is methamphetamine used?

- Smoked
- Snorted
- Orally ingested
- Injected

As with similar stimulants, methamphetamine most often is used in a "binge and crash" pattern. Because tolerance for methamphetamine occurs within minutes—meaning that the pleasurable effects disappear even before the drug concentration in the blood falls significantly—users try to maintain the high by bringing on the drug.

In the 1980's "Ice," a smokable form of methamphetamine came into use. Ice is a large, usually clear crystal of high purity that is smoked in a glass pipe like crack cocaine. The smoke is odorless, leaves a residue that can be re-smoked, and produces effects that may continue for 12 hours or more.

Short-term effects of methamphetamine abuse.

- Increased attention and decreased fatigue.
- Increased anxiety
- Decreased appetite
- Euphoria and rush
- Increased respiration

Long-term effects of methamphetamine abuse.

- Addiction
- Violent behavior
- Anxiety
- Confusion
- Insomnia
- Weight loss
- Psychotic features including:
  - Paranoia
  - Hallucinations
  - Mood disturbances
  - Repetitive motor activity

Medical complications of methamphetamine abuse.

- Cardiovascular problems including;
  - Rapid heart rate - Irregular heart beat
  - Increased blood pressure
  - Irreversible stroke producing damage to blood vessels in the brain.
- Hyperthermia (elevated body temperature) and convulsions with overdoses, and if not treated immediately, can result in death.

Chronic abuse of methamphetamine can result in;

- Inflammation of the heart lining;
- Damaged blood vessels and skin abscesses due to injection;
- Paranoia
- Anxiety
- Confusion
- Insomnia
- Acute lead poisoning
- Increased risk for contracting HIV/AIDS and hepatitis B and C.
- Abuse may result in prenatal complications
- Increased rates of premature delivery and altered neonatal behavioral patterns such as;
  - abnormal reflexes
  - extreme irritability

What treatments are effective for methamphetamine abusers?

A. Cognitive-Behavioral Therapy

Cognitive-behavioral therapy (CBT) derives, in part, from both behavioral and cognitive theories. While sharing a number of procedures in common, CBT is also distinct in many ways from other therapies. CBT places less emphasis on identifying, understanding, and changing underlying beliefs about the self and the self in relationship to substance abuse. It focuses instead on learning and practicing a variety of coping skills, only some of which are cognitive. A greater emphasis is also placed on using behavioral coping strategies, especially early in therapy. CBT tries to change what the client both does and thinks.

B. Methamphetamine Recovery Support Groups

Most treatment programs create aftercare programs for their alumni which include evening recovery groups. Content is consistent with AA, NA, etc.